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Futures of the Climate Action Movement: Insights from an Integral Futures Approach

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Abstract

In this paper, I use a Wilberian integral futures approach to examine visions of the future within the climate action movement and identify sources of agreement and contention. I argue that the Wilberian approach is particularly valuable in drawing out diverse futures associated with differing levels of consciousness. Applying this approach to the climate action movement, I identify a likely future in which the continued promotion of a particular set of ecological values limits the appeal of the movement and reduces its effectiveness. An alternative future sees movement leaders working from or adopting more diverse value positions to develop movement visions that have broader appeal and support more effective results.

Keywords: Sustainability, climate politics, integral futures, climate action movement

Introduction

Climate change has become the preeminent sustainability issue, receiving significantly more political, corporate, media and public attention than other pressing environmental and social issues. Around the world, a diverse movement has emerged seeking stronger action to respond to climate change. However, this movement lacks cohesion and has failed to build sufficient political power to trigger the various transformations required to substantially reduce greenhouse gas emissions (Shellenberger & Nordhaus, 2004). Shellenberger and Nordhaus (2004, p.32) argue that the inability of the climate action movement to achieve greater traction should be attributed to its inability to articulate 'a set of core beliefs, principles, or values' and that this is necessary for building political momentum and broadening support. In this paper I ask: is a shared vision for how to respond to climate change even possible and, if so, is it desirable?

There are important reasons for doubting this is possible or desirable. As Hulme (2009, p.xxvi) points out, disagreements about climate change run deep, revealing 'our different attitudes to risk, technology and well-being; our different ethical, ideological and political beliefs; our different interpretations of the past and our competing visions of the future'. Developmental psychologists have demonstrated that there are distinct value stages and worldviews that humans move through in the course of their interior development (e.g. Cook-Greuter, 2004; Esbjörn-Hargens & Zimmerman, 2009; Kegan, 1982; Wilber, 2000). Consequently people think, feel and interpret the world differently and have different visions of a sustainable civilisation.

In this paper, I use a specific integral futures approach that draws on Ken Wilber's integral theory (e.g. Wilber, 2000, 2001, 2007a, 2007b) and models of interior development to explore futures of the climate action movement. This Wilberian integral futures approach is used to examine visions being produced by the movement and identify sources of agreement and contention. I argue this approach – one of several holistic or integrative approaches to futures inquiry that explicitly respects plural perspectives (e.g. see Gidley, 2010; Inayatullah, 2010; Ramos, 2010; Slaughter, 2004, 2008a; Voros, 2008) – is valuable in drawing out the futures associated with differing levels of consciousness. Indeed, we all attempt to project our own values into the future and to create futures reflecting these values. Following an outline of key visions the movement has produced and is attempting to realise, areas of contention related to differing levels of consciousness are highlighted and implications for alternative climate movement futures identified. In examining the question of whether a shared climate change response vision is possible and desirable, I aim to identify ways in which the climate action movement can become more effective and demonstrate the practical value of integral approaches for futures practitioners.

The Climate Action Movement

When I refer to the climate action movement, I use the term 'movement' in the sense used by Paul Hawken in his book *Blessed Unrest* (Hawken, 2007). Hawken writes about an emerging environmental and social justice movement that does not fit the standard model of a movement. It 'is dispersed, inchoate, and fiercely independent. It has no manifesto or doctrine, no overriding authority to check with' (Hawken, 2007, p.3). It is nameless, is not bound together by any single issue, disagrees about as much as it agrees about, involves many different types of organisations and diverse individuals and is emerging from the bottom up.

The climate action movement is a more narrowly defined subset of Hawken's environmental and social justice movement. Despite their common interest in climate action, the diverse organisations and individuals that make up the movement hold different opinions on what constitutes an effective social response to climate change and how to achieve such a response. The climate action movement has no central organisation but is a shifting conglomeration of concerned individuals, non-government organisations (NGOs), progressive businesses and some governments or government agencies. Although dominated by environmental interests, the climate action movement increasingly includes social justice groups, the labour and workforce rights

movement, faith groups, charitable institutions and the aid and development sector.

The Wilberian Integral Futures Approach

As noted above, there are diverse holistic or integrative approaches to futures inquiry. In a 2010 special issue of *Futures* edited by Sohail Inayatullah (2010), the contributors demonstrate the breadth of such approaches. The specific Wilberian approach emerged over the last decade as futurists began to apply Ken Wilber's integral theory and philosophy to futures work (e.g. Floyd & Zubevich, 2010; Slaughter, 1998, 2004, 2008a, 2008b; Voros, 2008). It is not my intent to summarise Wilber's work here; good introductions include Wilber (2007b) and Wilber (2001). In essence, Wilber's philosophy attempts to 'honour all truths and acknowledge the value of many different ways of knowing across all significant fields' (Slaughter, 2004, p.152). It provides a framework for identifying and situating multiple perspectives on the future and a map of how human interiors develop and unfold over time. Perhaps its key value for futurists is in identifying perspectives, and futures, that are currently neglected, thus opening up alternative futures for exploration and realisation.

The application of Wilber's integral theory to futures work is an ongoing project that is still unfolding. The previously cited special issue of *Futures* criticised practitioners of Wilberian approaches for epistemic absolutism and ideological preferencing of Wilber's particular integrative approach. While I do not concede that this criticism is entirely justified, it is certain that Wilberian practitioners need to learn from the critiques and demonstrate sensitive and practical applications of integral theory if this theory is to provide an ongoing positive contribution to futures inquiry. I hope to demonstrate here that a Wilberian integral futures approach can provide valuable insights into possible futures and generate alternative futures by drawing hidden value conflicts into the open.

Wilber's integral framework comprises five elements: quadrants, levels, lines, states and types. Slaughter (2008a) describes each of these elements and its applicability to futures work in detail. Here, I will draw on only two elements: quadrants and levels.

Quadrants: Four Dimensions of Reality

Wilber identifies four primary dimensions of reality, emerging from two key distinctions: between exterior and interior perspectives (or objective and subjective perspectives); and between individual and collective perspectives. These twin distinctions give rise to a four quadrant model, shown in Figure 1.

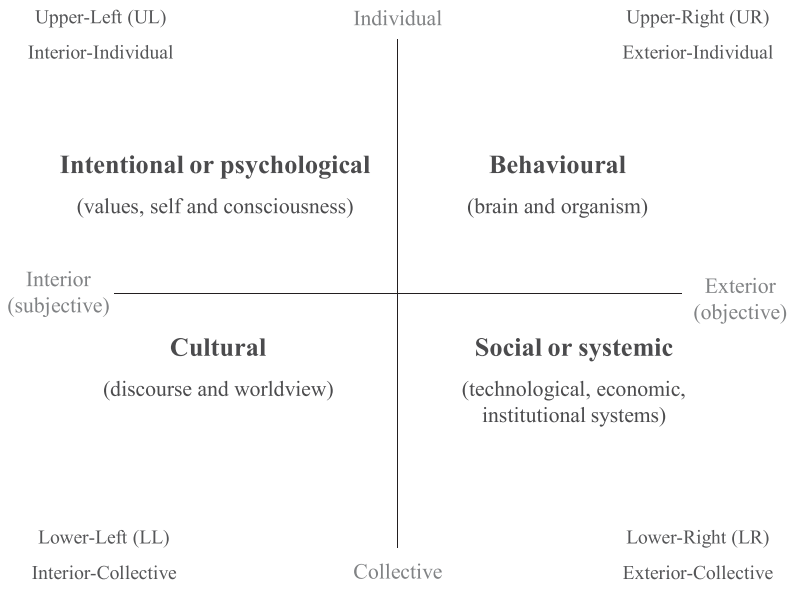

Figure 1. Wilber's four quadrants

The behavioural quadrant (upper-right in Figure 1) is concerned with the exterior of the individual, or the observable behaviour and structure of organisms. The social or systemic quadrant (lower-right) is concerned with the exterior of collectives, or the structure and dynamics of technological, economic, institutional and ecological systems. The intentional or psychological quadrant (upper-left) is concerned with the subjective interior of individuals, or self, consciousness, personal experiences and values. The cultural quadrant (lower left) is concerned with the inter-subjective interior of collectives, or culture, worldview and discourse. Integral theory contends that all four perspectives are needed to develop a comprehensive understanding of any problem or situation. Below, I use these quadrants to structure an initial examination of visions in the climate action movement.

Levels of Consciousness

One of the key insights from earlier applications of Wilber's work to climate change is that the interior quadrants – the intentional and cultural – tend to be neglected (Riedy, 2007; Slaughter, 2009). Most proposed responses to climate change are concerned with behaviour change or changes to technological, economic and social systems. Very few demonstrate awareness of how the structure of our interior values and cultures can hinder or facilitate exterior changes (Hulme, 2009 is a notable exception). Hence, the second key concept from integral theory that I will use in this paper is that there are levels of development within each quadrant and that each new level transcends and includes the previous level (Esbjörn-Hargens, 2009). While the evolution of organisms and systems is a familiar concept for most, research from develop-

mental psychology demonstrating that our individual interiors and shared cultures evolve over time is less familiar.

Developmental psychologists use various classification schemes to identify the stages of interior human development but common themes are evident (Wilber, 2000). Here, I use a subset of the colour-coded levels of consciousness outlined by Wilber (2007a, 2007b) as a general scheme for discussing developmental stages, as summarised in Table 1. The colour labels are not intended to categorise or label individuals; individuals operate from different levels of consciousness in different contexts and at different times, and they may exhibit different levels of development in different spheres, such as cognitive, emotional, moral or values spheres. Instead, the labels are used to conveniently represent and summarise the complexity contained in multiple developmental theories, such as Robert Kegan's work on orders of consciousness (Kegan, 1982) and Jane Loevinger and Suzanne Cook-Greuter's work on ego development (Cook-Greuter, 2007). Correlations between the colour labels and stages in these developmental theories are indicated in Table 1. Correlations with additional psychological theories are identified in Wilber (2000 & 2007b). The selection of levels of consciousness in Table 1 is not the full spectrum identified by Wilber and others. I have focused on Red to Teal as these are the most prevalent levels of consciousness in adult populations (Brown & Riedy, 2006; Cook-Greuter, 2007) and most likely to be engaged in the climate action movement. There are stages prior to Red and following Teal in many developmental theories.

After examining movement visions from the perspective of each quadrant, I will use the levels of consciousness to explore the sources of key differences that become apparent.

Table 1.
Levels of consciousness (Slaughter, 2009 & Wilber, 2007b & Wilber, Patten, Leonard, & Morelli, 2008)

Level of Consciousness	Identity	Worldview	Robert Kegan (Kegan, 1982)	Cook-Greuter (2007)
Red (egocentric)	Egocentric (me)	It's a jungle out there, only the strong survive and I do what I have to so I can get what I want	2nd order	Self-protective
Amber (mythic self)	Ethnocentric (my group)	Conservative, traditional, authoritarian, my group is united by belief and higher principles, I submit to the will of the group, obey its rules and do my duty in anticipation of future reward	3rd order	Conformist
Orange (achiever self)	Sociocentric (my country)	Rational, strategic, modern, striving to win in a competitive marketplace, we can find solutions if we plan and innovate	4th order	Conscientious
Green (sensitive self)	Worldcentric (all of us)	Pluralistic, egalitarian, ecological, we are part of an interconnected web of life, we need to give recognition to diverse perspectives and seek consensus	4th to 5th order transition	Individualistic
Teal (holistic self)	Planetcentric (all beings)	Recognises multiple worldviews and sees that some are more inclusive than others, seeks out multiple perspectives as a source of creativity, comfortable with chaos and working with complex systems	4th to 5th order transition	Autonomous

Visions of the Climate Action Movement from Four Perspectives

Behavioural visions

Applying a behavioural perspective to climate movement visions means examining what type of behaviours the movement is advocating to bring about a desired future. There are two immediate distinctions. First, participants in the climate action movement identify behaviour by different key actors as critical for an effective response to climate change. One way that this manifests is in disputes between those focused on political lobbying and those focused on building popular movements. For example, in a recent review of climate blogger Joe Romm's book *Straight Up*, Bill McKibben (2010) writes:

> *In fact, my main dispute with Romm's work is his relentless focus on Washington...He's paid less attention to the emerging popular movement on climate change than to the machinations of the Senate, but if we're actually going to get change on the scale we need, it's quite possible it won't happen without an aggressive, large, and noisy movement demanding that change...[M]ost of the D.C. green movement has pretty much written off organizing out in the hinterlands in favor of lobbying in the offices of senators and congressmen.*

The second distinction relates to the type of behaviour that is advocated, such as consuming 'green' products, protests and civil disobedience, political advocacy, different voting behaviours, investment in low-carbon technologies or local self-sufficiency behaviours. Emerging from this second distinction, a key point of contention for the movement is whether an effective response to climate change requires radical changes in behaviours and lifestyles or tweaking and redirection of existing ones. Nordhaus and Shellenberger (2009, p.16) argue that 'the shift we must make does not require a transformation of our hearts, minds and lifestyles, but rather of the underlying technologies that power our civilization'. In contrast, Crompton and Thøgersen (2009, p.141) contend that the 'comfortable perception that global environmental challenges can be met through marginal lifestyle changes no longer bears scrutiny'.

Systemic visions

A systemic perspective draws attention to movement visions of a desirable future climate system and the technological, economic and institutional systems required to realise those desirable futures. Desirable technological responses are hotly contested. While there is widespread support within the movement for renewable energy generation and for technological responses that improve energy efficiency, some advocate more controversial technological responses such as nuclear power, carbon capture and storage, and geoengineering. For example, James Lovelock argues that the urgency of climate change response is such that there is no time to experiment with emerging forms of alternative energy and we need to immediately turn to nuclear power (Lovelock, 2006). Many in the movement strongly disagree, citing the risks and expense of nuclear power as key objections. Similarly, some movement participants advocate carbon capture and storage technologies (e.g. WWF, 2007), while others seek a future in which both nuclear power and fossil fuels are completely phased out (e.g. Greenpeace International & EREC, 2010).

The movement also disagrees on how such responses should be supported and stimulated. While many advocate carbon pricing, either through taxation or emission trading schemes, some prefer direct government investment in clean energy technologies to bring down their costs (Nordhaus & Shellenberger, 2009). Nordhaus and Shellenberger (2009) argue that politicians will always seek to set carbon prices low enough to avoid public unrest due to rising energy bills, and that these low prices are not sufficient to stimulate the necessary technological revolution. It is better, they argue, to invest directly in technological innovation and to avoid targets and trading schemes.

Another point of disagreement relates to the form of international governance and decision-making in relation to climate change response. While there is widespread agreement that existing governance structures are inadequate, diverse proposed responses include eco-localism (i.e. shifting the locus of decision-making back towards local communities), continued pursuit of a legally binding treaty under the United Nations Framework Convention on Climate Change, pursuit of other multilateral agreements (e.g. the Copenhagen Accord or commitments through the Group of Twenty (G-20)) and establishment of a World Parliament of representatives elected by the people of the world. I will return to the issue of governance later in the paper.

Even if the movement could agree on what kind of technological, economic and institutional responses are appropriate, it lacks a consensus view on the climatic conditions that should constitute the endpoint of climate action. Some participants argue that it is sufficient to limit temperature rises to no more than 2˚; others argue for no more than 1.5˚; and some argue that existing temperature rise is already unacceptable and the climate system needs to be returned to its pre-industrial state. I will explore the basis for this fundamental disagreement in more detail later in the paper.

Cultural visions

A cultural perspective focuses attention on the discourses, narratives and myths of climate change. Hulme (2009) explores this in great detail and shows the many different ways in which climate discourses can be characterised. For example, Hulme identifies four shared narratives:

- *Lamenting Eden*, where climate change is a departure from an imagined wild and natural state and the vision is for a return to that state
- *Presaging Apocalypse*, where climate change brings doom and disaster upon humanity and we need to mobilise urgently to respond
- *Constructing Babel*, in which humanity triumphs over climate change and masters the climate system through our ingenuity and technology
- *Celebrating Jubilee*, in which climate change is an idea around which pre-existing concerns for environmental and social justice can be mobilised.

Each narrative is evident in the climate action movement and they support very different visions. For example, a vision drawing on the *Constructing Babel* narrative would define success solely as the transformation of the technological system to deliver a low-carbon economy. In contrast, a vision drawing on *Celebrating Jubilee* would require global inequity to be addressed as part of the response to climate change and might be based around the principle of equal future rights to the atmosphere.

A cultural perspective also draws attention to theories of cultural change that exist within the movement. There is a divide between those who see the pathway to cultural change as one of grassroots action, protest and civil disobedience and those who see political strategy, lobbying and advocacy as the best way to bring about change. As identified by Dahle (2007), these differences are centred on whether change requires reform or revolution, whether change will be top-down or bottom-up and whether change can be achieved now or only after ecological or social collapse.

Many movement visions are largely devoid of any cultural vision. For example, Beyond Zero Emissions recently (2010) released a plan for shifting Australia to a zero carbon economy by 2020, in which there was almost no mention of the political and cultural changes required. There is an implied vision of an unchanged culture that adopts systemic responses to climate change without any shift in cultural narratives or values. Given the evidence for significant cultural barriers to adoption of alternative energy sources (e.g. Sovacool, 2009), this omission is unfortunate.

Psychological visions

A psychological perspective focuses attention on movement values and theories about how individuals can be motivated to take action to respond to climate change. A

key distinction here is between those who argue that values are either fixed or do not need to change and those who argue that transformation of values is essential. For the former, the most effective way to motivate people is to employ motivational messages that resonate with existing values. This kind of approach, typical of social marketing, attempts to identify existing values and to come up with communications that resonate with those values (e.g. DEFRA, 2008; Futerra, 2009). If most people are individualistic and materialistic, then the challenge is to find types of action that can deliver financial gains or improvements in individual status, such as improving energy efficiency, or purchasing highly-visible solar panels or hybrid cars. This approach does not seek to question values but takes them as given. As Crompton and Kasser (2009, p.2) put it, the assumption is that 'environmental campaigners cannot afford to be precious about the reasons that motivate individuals to adopt behaviour changes'. Implicit in this view is that the scale of change required to respond to climate change is consistent with existing values.

The alternative view is that climate change response requires more radical changes to individual lifestyles and social and cultural practices. This means that new values will need to emerge as part of an effective response. Many within the movement therefore include new values as part of their visions of the future. For example, Crompton and Kasser (2009, p.5) propose an approach called identity campaigning that seeks to connect with, support and activate intrinsic values including 'the pursuit of self-acceptance (trying to grow as a person), affiliation (having good interpersonal relationships) and community feeling (trying to make the broader world a better place)'. People operating from these values are considered to be more likely to be self-motivated to respond to climate change.

Others within the movement promote broad visions of new ecological values. The proposal of a Universal Declaration of the Rights of Mother Earth by the World People's Conference on Climate Change and the Rights of Mother Earth (http://pwccc.wordpress.com/) is a recent attempt to provide a framework for these broader values.

The four perspectives discussed above give just a taste of the many points of diversity and difference. In the next section, I will use the concept of levels of consciousness to explore the sources of some of these points of contestation in more detail.

Using Depth to Explore Contested Visions

What is a safe climate?

The United Nations Framework Convention on Climate Change has as its objective the prevention of 'dangerous anthropogenic interference with the climate system'. Responding to this language, Spratt and Sutton (2008) introduced the notion of a *safe climate* as the desired endpoint of climate action. Spratt and Sutton's (2008) vision of a safe climate is one in which global average temperatures and atmospheric concentrations of greenhouse gas emissions return to the levels that prevailed prior to the Industrial Revolution. Based on their reading of the science, the global climate system is sufficiently sensitive to perturbation that the risks associated with any significant

increases in greenhouse gas emissions and global average temperatures from the stable conditions of the last 10,000 years are unacceptable.

However, Spratt and Sutton's (2008) vision of what constitutes a safe climate is not universally shared. The complexity of the climate system and the degree of uncertainty about future developments is such that climate science is unable to provide a definitive statement about the level of greenhouse gases in the atmosphere that can be considered safe. There are particular uncertainties about how sensitive the climate system is to different levels of human greenhouse gas emissions, how much warming would be sufficient to trigger positive feedback loops in the climate system and how different levels of warming translate into impacts on human infrastructure and ecological systems.

In situations where this kind of uncertainty exists, responses are influenced by how individuals perceive, assess and manage risk. Risk is socially constructed and different people and groups form very different positions on how risk should be managed (Adams, 1995; Hulme, 2009). One way to categorise risk perceptions is using grid-group cultural theory, which links risk perception to different myths of nature. Grid-group cultural theory identifies four distinct ways of life and Hulme (2009, pp.189-190) outlines how each views the climate system:

- *Fatalists* see nature as capricious and believe that outcomes are a function of chance. This group 'sees the climate system as fundamentally unpredictable, influenced by a multiplicity of factors of which humans are but one'. They argue that we cannot hope to control the climate or manage the risks it presents.
- *Hierarchists* see nature as tolerant within limits but perverse outside those limits. This group seeks greater knowledge and predictive capability so that humans can identify the limits of the climate system and manage the system so that those limits are not exceeded.
- *Individualists* see nature as benign. From this perspective, 'risks introduced by climate change are viewed as manageable and, even with humans altering the global atmosphere, the Earth's climate will re-establish itself at a tolerable and non-dangerous level'.
- *Egalitarians* see nature as ephemeral, 'existing in a precarious and delicate state of balance'. In this view, the 'slightest perturbance by humanity can trigger a collapse in the system' and the 'risks of climate change are frightening and may spiral out of control'.

An important insight provided by integral theory is that these differing perceptions of risk are associated with different levels of consciousness. In earlier work (Riedy, 2008), I showed that the categories identified by grid-group cultural theorists closely correspond to the distinct levels of consciousness in Table 1. The nature of the alignment is summarised in Table 2, which also shows the myth of nature associated with each level and the corresponding vision of a safe climate. Grid-group cultural theory does not identify a way of life consistent with the Teal level of consciousness, however I have proposed a myth of nature and a vision of a safe climate consistent with that level of consciousness.

Table 2.
Level of consciousness, risk perception and visions of a safe climate

Level of consciousness	Way of life (grid-group cultural theory)	Myth of nature	Vision of a safe climate
Red	Fatalist	Nature is a lottery, capricious	There is no safe climate, we are always at risk and the climate system is beyond our control
Amber	Hierarchist	Nature is tolerant if treated with care (but perverse if not)	We can manage the threat of climate change by limiting temperature rise to x degrees, based on expert predictions
Orange	Individualist	Nature is benign, forgiving and resilient	The climate system will remain safe within broad limits, we will develop new technologies and adaptation strategies to keep it that way
Green	Egalitarian	Nature is ephemeral and unforgiving	The only safe climate is the one that existed prior to the Industrial Revolution
Teal	No correlation	Nature can be all of the above, in different contexts	Visions of a safe climate are plural and acceptable risk needs to be negotiated through public debate

Examples of most of these visions can be readily found in the climate action movement, with the exception of the Red vision. The Amber vision is very common in the climate action movement globally and most prevalent in governments, faith-based organisations and some of the larger, corporate environmental NGOs. For example, the WWF Australia website (WWF Australia, 2010) states:

> *Stay under a global average temperature increase of 2 degrees Celsius...Scientists and some governments agree that an average global warming of 2 degrees or more above the pre-industrial level would result in dangerous and irreversible climate change with dramatic social, economic and environmental impacts.*

The precise degree of acceptable warming varies. For example, the Alliance of Small Island States (AOSIS) calls for 'global average surface temperature increases to be limited to well below 1.5˚C above pre-industrial levels' (AOSIS, 2009). Others in the movement are shifting to this position in response to emerging scientific evidence that the climate system is more sensitive to greenhouse gas emissions than previously realised. For some, particularly in faith-based organisations, the Amber level of consciousness is expressed through a principle-based vision of stewardship of the Earth rather than through specific temperature limits.[1]

The Orange level of consciousness is expressed in positive visions that focus on achieving economic prosperity and delivering green jobs through low carbon technologies. The New Apollo Program in the United States is a good example that focuses on five key initiatives: rebuild America clean and green; make it in America; restore America's technological leadership; tap the productivity of the American people; and reinvest in America (Apollo Alliance, 2008, pp.4-5). Orange visions are less prevalent in the climate action movement; people operating from this level of consciousness may be more focused on material success and less likely to think the safety of the climate system is under real threat.

The Green level of consciousness is evident in Spratt and Sutton's (2008) vision of a safe climate. Safe Climate Australia (SCA) argues that 'we are already above safe levels of greenhouse gases in the atmosphere, and so our strategic aim should be "zero human induced warming"' (Safe Climate Australia, 2009, p.3). SCA's vision is to reduce greenhouse gas emissions to zero and then to draw down excess greenhouse gas from the atmosphere, using land management and biomass processing to return the climate system to a pre-industrial state. Similarly, in his new book *Eaarth*, Bill McKibben (2010b) argues that we are already living on an unsafe planet that has passed critical tipping points. Based on my personal experience working with the climate action movement in Australia and internationally, the Green vision is currently the most prevalent in the grassroots climate action movement.

Teal visions are more difficult to find in the movement but Hulme (2009, pp.104-105) offers an excellent example when writing about the co-production of scientific knowledge and policy:

> *The way to consider dangerous climate change under this model of science-policy interactions would be to invite open consultation across society about what dimensions of risk actually matter to the public, to invite experts to assess and contribute what is known about the risks of different levels of climate change, and to require politicians and policy makers to argue and negotiate in public about what level of risk is intolerable and to set policy accordingly.*

Here, we see openness to plural visions of what might constitute a safe climate and a commitment to participatory processes that can navigate complexity and plurality to arrive at a decision about how to act. This is typical of the Teal level of consciousness. However, also typical of Teal consciousness is the ability to translate messages to resonate with other value stages. Many within the climate action movement may be working from Teal consciousness but expressing themselves using language associated with other value stages. Further qualitative research would be necessary to investigate this possibility.

What should we do to bring about a safe climate?

The concept of levels of consciousness also helps to characterise differing visions of how we should act to bring about a safe climate. Table 3 summarises visions of the path to a safe climate associated with different levels of consciousness, focusing on three elements: climate governance, theories of social change and theories of personal change. To some degree these depictions are sketches or caricatures; the real positions advocated by movement participants are more complex and may combine multiple elements. Nor are the visions presented here exhaustive. Nevertheless, this characterisation does help to delineate key sources of difference. I have excluded the Red level of consciousness as people operating predominantly from this level do not believe a safe climate is possible and consequently see no pathway towards one.

Table 3.
Levels of consciousness and visions of the paths to a safe climate

Level of consciousness	Vision of climate governance	Vision of social change	Vision of personal change
Amber	Environmental authoritarianism, where elites within national governments and the United Nations are trusted to get on with the job of managing the climate based on expert advice	Top-down, existing institutional structures are largely conserved	No shift in values required, individuals will respond to new rules and regulations imposed by governments
Orange	Governments to provide the framework and rules for market-led solutions, such as emissions trading and green consumption	Commodify carbon to harness business innovation, Green consumerism (shopping our way out of climate change), reform existing institutions	No shift in values required, consumers respond rationally to price signals and act on their own ethical imperatives
Green	Eco-localism (i.e. a network of diverse, grassroots responses) and/or reform of the UNFCCC system to better represent and respond to global diversity	Activism to bring about radical, revolutionary shifts in society	Work together in supportive groups, draw out and nurture ecological values
Teal	A flexible system of multiple, scale-appropriate governance structures, from local to global. Effective action is prioritised over idealised agreements, whether through multilateral processes, smaller country groupings (i.e. minilateralism), business initiatives or civil society action.	Complex and chaotic, punctuated equilibrium, you never know when rapid change will become possible so need to be ready	Tailor motivational strategies and messages to reach multiple values

Although space does not permit detailed justification and explanation of the visions presented in Table 3, I will provide a brief commentary. The Amber pathway seeks top-down reform of existing institutional structures to create new rules and regulations to constrain greenhouse gas emissions. The vision is essentially conservative, with no radical institutional changes and no need for individuals to shift their values. However, in extreme forms this vision can be expressed as a desire for environmental authoritarianism. For example, James Lovelock recently argued that to deal with climate change it 'may be necessary to put democracy on hold for a while' (Hickman, 2010). While Lovelock's vision is an extreme one, the Amber vision does generally imply a ceding of authority to elites and scientific experts.

The Orange pathway characteristically focuses on market-led solutions, such as emission trading schemes and carbon taxation, as well as direct investment in technological solutions. In this vision, the role of governments is to establish the rules and frameworks of new markets and then to leave it to markets (and producers and consumers) to respond. This is essentially a vision of commodification of greenhouse gas emissions, creating opportunities to profit from a new, low-carbon economy. Once carbon is appropriately priced, businesses will shift to production of low-carbon products and services and consumers will respond to price signals. This vision does not foresee radical change of institutional structures or values. Rather, it proposes reform of the existing capitalist economy.

Green pathways contemplate more radical departure from existing institutional structures and governance systems. While these visions can take multiple forms, a key distinction is between those who advocate eco-localism or new forms of global governance. The former view is expressed by numerous Transition Initiatives and local climate action groups that have emerged around the world. A 'Transition Initiative (which could be a town, village, university or island etc) is a community-led response to the pressures of climate change, fossil fuel depletion and increasingly, economic contraction' (Transition Network, 2010). Transition Initiatives seek to re-localise 'all essential elements that a community needs to sustain itself and thrive' as a response to peak oil and climate change (Brangwyn & Hopkins, 2008, p.7). For the Transition Movement and similar initiatives, the pathway to an effective response to climate change lies with a shift in the locus of decision-making towards local communities. At its extreme, this eco-localism is expressed through anarchist philosophies that see no role for the State or other authoritarian structures (e.g. Jasiewicz, 2008).

An alternative Green vision advocates a shift in power upwards to a global scale:

> *coherent and timely responses lie beyond the grasp of our myopic and disputatious state-centric political order. Closing this perilous gap between obsolete geopolitics and emerging geo-realities delineates an urgent political endeavour: constructing a legitimate and effective system of world governance (Raskin & Xercavins, 2010, p.1).*

There are multiple visions of what constitutes an effective system of world governance and how it could be brought about. For some, the solution is a form of direct citizen representation at the global level, such as a World Parliament (Raskin & Xercavins, 2010). For others, there is scope to reform the United Nations and the Framework Convention on Climate Change.

In both of these Green visions, change is secured through activism and advocacy by concerned individuals to force radical shifts in the direction of society. The vision is one of activists working together in supportive groups based on shared values. In this vision, it is assumed that most people hold ecological values, although these may be latent. The movement grows by activating ecological values in the wider population and recruiting people that hold these values into the movement.

I will discuss the final set of visions in Table 3, associated with the Teal level of consciousness, in the next section.

Exploring Climate Movement Futures

The discussion so far demonstrates the breadth of visions within the climate action movement and shows that at least some of the observed differences are associated with differing levels of consciousness. Through political engagement, individuals and groups advocate their visions and seek to promote them as desirable futures, within and beyond the climate action movement. Given the evident diversity of these visions and their relationship to levels of consciousness, it is not surprising that the movement has been unable to agree on its objectives or how to achieve them.

The visions that I have reviewed here constitute a selection of futures that the movement has identified and is attempting to realise. Discerning probable futures from this diversity is difficult, however integral theory can provide valuable guidance. Wilber (2000, p.137) contends that it is only with the emergence of the Green level of consciousness that individuals begin to care deeply about global environmental problems:

> *Gaia's main problem is that not enough human beings have developed to the post-conventional, worldcentric, global levels of consciousness, wherein they will automatically be moved to care for the global commons.*

Although I have identified visions within the climate action movement that are associated with other levels of consciousness, it is those associated with Green or later levels that predominate. People operating from the Green level are the originators and driving force of the movement, driven by ecological values and a deep sense of awareness of global connectedness and the potential impacts of climate change on people and ecosystems. The existence of diverse visions within the climate action movement is actually a measure of the success of the movement in broadening its constituency beyond the Green level of consciousness and finding ways to translate its concerns into terms that can be readily incorporated into discourse associated with other levels, particularly Amber and Orange.

However, this process of translation has been largely unconscious because a key characteristic of the Green level (and all preceding ones) is that it is unaware of the existence of values other than its own (Wilber, 2000). Thus, people operating from the Green level assume that others share their values and will be convinced to act by the same arguments. This stymies strategic attempts to develop arguments and messages that appeal to people holding different values. Further, Green values are often expressed as a negation of Amber and Orange values – what the movement is against – rather than a positive vision of what the movement is for. This is not a stance designed to engage those holding Amber and Orange values, as it immediately places their values under attack.

A likely future, then, is one in which Green values continue to dominate the movement and it continues to insist on urgent and radical changes to respond to climate change, in line with ecological concerns. The movement will continue to be resisted by mainstream political institutions dominated by Amber and Orange values, so that climate change response will always fall short of what is desired. The movement is likely to amass increasing political power over time as more people gravitate to Green values, but the dominance of these values will marginalise the other values that exist within the movement and movement power will develop too slowly to deliver the kinds of responses it desires.

An alternative future, and one that I think is more desirable, is evident in the visions associated with the Teal level of consciousness. The Teal level is the first that no longer exclusively identifies with any particular perspective (Esbjörn-Hargens & Zimmerman, 2009). Thus, people operating from the Teal level of consciousness recognise that others have diverse visions, values and perspectives and that they will consequently have different motivations for responding to climate change. People

operating from the Teal level can consciously work to identify arguments and messages that will appeal to all of the different levels of consciousness, thereby broadening the potential reach of the movement and increasing the likelihood of an effective response.

I have outlined the elements of the Teal vision in Table 2 and Table 3. In essence, Teal recognises that urgency must be balanced with pragmatism and that positive social change can only be achieved by respecting and including people holding multiple values. Effective action is prioritised over any ideological commitment to particular governance structures and action is pursued across multiple scales, from local to global. The Teal level is comfortable with the apparent chaos of current climate change response, recognising that society is in a process of experimenting with diverse possible responses to find out what works. Teal seeks to construct arguments, messages and initiatives that will appeal to multiple values and broaden the coalition of actors participating in the movement. For example, it can reach out to Red with images of mobilising for a war against climate change, to Amber by appealing to principles of Earth stewardship, to Orange with the lure of climate prosperity and to Green by highlighting impacts on people and ecosystems. Perhaps the strongest hope for a more effective future for the climate action movement is for the movement leadership to become more aware of multiple values and perspectives and to consciously design political strategies for recruiting people holding these values. There may already be leaders within the movement that are adopting such an approach and this would be a worthy topic for further research.

Conclusion

In this paper, I have attempted to demonstrate the value of a Wilberian integral futures approach, drawing on two specific elements of Wilber's integral theory – quadrants and levels of consciousness. A quadrant scan gives an internally consistent and comprehensive structure for identifying the multiple dimensions of an issue. It is valuable for identifying possible futures stemming from both exterior and interior trends. The Wilberian approach is not the only futures approach that draws attention to interiors; other methods, such as causal layered analysis (Inayatullah, 1998) and a broader group of integral futures approaches (Inayatullah, 2010) can deliver similar insights.

Where I believe the Wilberian integral futures approach delivers unique value is in using the concept of levels of consciousness to provide a structure for exploring the value commitments that underlie different futures. The different levels of consciousness draw attention to deep sources of conflict and provide foci for identifying possible futures. Importantly, the developmental relationship between the levels of consciousness supports specific exploration of futures that might emerge as people shift between levels. The notion of interior development can also help futurists to locate the present moment within a process of development and understand likely interior trajectories, alongside exterior trajectories.

The specific application of a Wilberian integral futures approach to the climate action movement reveals a movement that includes diverse values but is weighted towards Green. Many in the movement remain unaware of the diverse values that exist

within it and broader society, or unsure of how to work with these values. The movement is currently characterised by conflicts over how to change behaviours, which technological, economic and institutional systems to advocate in response to climate change, how to balance urgency and pragmatism, whether the required change is radical or reformist and whether or not new values are needed. These debates are likely to continue and conflict may deepen as the gulf between political action and the urgency felt by the movement widens.

There are seeds of a more hopeful future emerging from movement leaders operating from a Teal level of consciousness. Whereas Shellenberger and Nordhaus (2004) advocate the development and articulation of a single core set of agreed movement values, this alternative approach would seek to build awareness of multiple values and to develop strategies to broaden the movement by respecting and working with these diverse values. In support of this vision, work like Hulme's (2009) on the sources of disagreement needs to be widely read and understood within the movement, so that participants can recognise multiple values and discourses and develop tailored strategies. Much more work is needed on the types of strategies that appeal to different levels of consciousness. The movement also needs to heed advice (e.g. Futerra, 2009; Steffen, 2008) about presenting positive visions of desirable futures, rather than the negative scenarios it resists.

What is abundantly clear from the decades of campaigning on this issue is that the existing approach is not delivering the response the movement is seeking, and the visions it advocates are not gaining sufficient traction. New approaches are needed and one possibility is to help movement leaders to develop the ability to see and inhabit multiple perspectives. This can perhaps provide the starting point for a more inclusive movement that respects and holds multiple visions as a source of strength and appeal, rather than seeking to manufacture agreement around a single core vision.

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Notes

1. See The Climate Institute (2006) for examples from Australian religious leaders.

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